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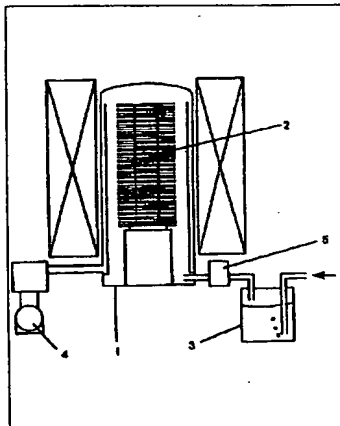
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## ===== WPI =====

- TI - Boron containing poly:silicon film mfg method - involves boron impregnation in poly:silicon film from carrier gas
- AB - J07230957 The mfg method involves introduction of carrier gas consisting of trimethyl boron or triethyl boron compound of 0.001-0.1% atomic and a mono silane compound into a reaction room (1) of a CVD device. The gaseous mixture is decomposed of heat application in the range of 550-680 deg C on a silicon wafer (2). Deposition of boron containing polysilicon film is thus carried out.
- USE/ADVANTAGE - In formation of gate electrode. Reduces electrical resistance. Avoids oxygen mixing into polysilicon film. Facilitates formation of film from big silicon grains. Performs simultaneous processing of boron introduction and polysilicon film formation. Controls gas supply with higher accuracy. Reduces cost. Stabilises characteristics.
- (Dwg.1/1)
- PN - JP7230957 A 19950829 DW199543 H01L21/205 003pp
- PR - JP19940040560 19940215
- PA - (YAWA ) NIPPON STEEL CORP
- MC - L04-C02C L04-C10B
- U11-A01M U11-C01B U11-C01J2
- DC - L03 U11
- IC - H01L21/205 ;H01L29/78
- AN - 1995-334176 [43]

## ===== PAJ =====

- TI - FORMING METHOD OF BORON-CONTAINING POLYSILICON FILM
- AB - PURPOSE:To form a boron-doped polysilicon film of low resistance with high controllability of the resistance.
- CONSTITUTION:Carrier gas containing 0.001 to 0.1 atomic % of trimethylboron or triethylboron and monosilane (or high-order silane) are introduced into a reaction chamber 1 of a CVD device, which are made to react with each other and thermally decomposed on a silicon wafer 2 heated up to a temperature of 550 to 680 deg.C to deposit a polysilicon film thereon. At this point, methyl groups or ethyl groups contained trimethylboron or triethylboron are made to react with oxygen mixed in carrier gas and combined together, so that oxygen is restrained from mixing into a polysilicon film, and a polysilicon film with large grain size is formed and restrained from unexpected variation in resistance.
- PN - JP7230957 A 19950829
- PD - 1995-08-29
- ABD - 19951226
- ABV - 199511
- AP - JP19940040560 19940215
- PA - NIPPON STEEL CORP
- IN - YOSHIZAWA SHUNICHI
- I - H01L21/205 ;H01L29/78



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